

CLAIMS

In The Claims

Claims 1 –16 (previously cancelled).

17. (previously presented) An ultra wide band network, comprising:

a master device;

a plurality of slave devices structured to communicate with the master device using a plurality of ultra wide band pulses; and

a medium access control protocol comprising:

a time division multiple access frame comprising a start-of-frame section, a command section, and a data slot section, with the data slot section including a plurality of variable-length data slots;

a synchronization slot; and

a timestamp slot.

18. (previously presented) The ultra wide band network of claim 17, wherein the medium access control protocol further implements a dynamic requisition of the variable-length data slots.

19. (previously presented) The ultra wide band network of claim 17, wherein the medium access control protocol further implements a dynamic allocation of the variable-length data slots.

20. (previously presented) The ultra wide band network of claim 17, wherein the medium access control protocol further implements a dynamic reallocation of the variable-length data slots.

21. (previously presented) The ultra wide band network of claim 17, wherein the variable-length data slots have a granularity of one bit.

22. (previously presented) The ultra wide band network of claim 17, wherein the master device and slave device coordinate a switch from a first set of data slot parameters to second set of data slot parameters.

23. (previously presented) The ultra wide band network of claim 17, wherein the timestamp slot further comprises a bit-field which is incremented by a master timestamp counter.

24. (previously presented) The ultra wide band network of claim 23, wherein each of the slave devices is configured to maintain a copy of the master timestamp counter.

25. (previously presented) The ultra wide band network of claim 23, wherein each of the slave devices is configured to provide a local copy of the master timestamp counter which allows slave devices to identify a scheduled frame time.

26. (previously presented) The ultra wide band network of claim 17, wherein each slave device is structured to coordinate a schedule switch from a first set of data slot parameters to a second set of data slot parameters.

27. (previously presented) The ultra wide band network of claim 17, wherein the ultra wide band network comprises media selected from a group consisting of: guided media, wired media, unguided media, and wireless media.

28. (previously presented) The ultra wide band network of claim 17, wherein the ultra wide band network comprises a wireless communication between the master device and the plurality of slave devices.

29. (previously presented) An ultra wide band network, comprising:

a master device;

a plurality of slave devices structured to communicate with the master device using a plurality of ultra wide band pulses; and

a computer program product comprising a medium access control protocol comprising:

a time division multiple access frame comprising a start-of-frame section,

a command section, a data slot section comprising a plurality of variable-length data slots, a synchronization slot and a timestamp slot.

30. (previously presented) The ultra wide band network of claim 29, wherein the computer program product comprising the medium access control protocol further implements logic so that the master device and slave device coordinate a switch from a first set of data slot parameters to second set of data slot parameters.

31. (previously presented) The ultra wide band network of claim 29, wherein the timestamp slot further comprises a bit-field which is incremented by a master timestamp counter.

32. (previously presented) The ultra wide band network of claim 29, wherein each of the slave devices is configured to maintain a copy of the master timestamp counter.

33. (previously presented) The ultra wide band network of claim 29, wherein each of the slave devices is configured to provide a local copy of the master timestamp counter which allows slave devices to identify a scheduled frame time.

34. (previously presented) The ultra wide band network of claim 29, wherein each slave device is structured to coordinate a schedule switch from a first set of data slot parameters to a second set of data slot parameters.

35. (previously presented) The ultra wide band network of claim 29, wherein the variable-length data slots have a granularity of one bit.

36. (previously presented) The ultra wide band network of claim 29, wherein the ultra wide band network comprises media selected from a group consisting of: guided media, wired media, unguided media, and wireless media.

37. (previously presented) The ultra wide band network of claim 29, wherein the ultra wide band network comprises a wireless communication between the master device and the plurality of slave devices.

38. (previously presented) A method of scheduling an assignment of a variable-length data slot in an ultra wide band network, the method comprising the steps of:

providing a master device,

providing a plurality of slave devices structured to communicate with the master device using a plurality of ultra wide band pulses;

providing a computer program product comprising a medium access control protocol comprising:

a time division multiple access frame comprising a synchronization

slot and a timestamp slot, and a plurality of variable-length data slots; and

determining a schedule time to communicate the assignment and a reallocation of the variable-length data slots to each of the slave devices.

39. (previously presented) The method of claim 38, further comprising the step of scheduling the assigning and reallocation from a first set of data slot parameters to a second set of data slot parameters with a scheduling frame transmitted at the schedule time.

40. (previously presented) The method of claim 38, further comprising switching a variable-length data slot parameter for each participating slave device at the schedule time.

41. (previously presented) A method of scheduling an assignment of a variable-length data slot in an ultra wide band network, the method comprising the steps of:

means for providing a master device,

means for providing a plurality of slave devices structured to communicate with the master device using a plurality of ultra wide band pulses;

means for providing a computer program product comprising a medium access control protocol comprising:

a time division multiple access frame comprising a synchronization

slot and a timestamp slot, and a plurality of variable-length data slots; and

means for determining a schedule time to communicate the assignment and a reallocation of the variable-length data slots to each of the slave devices.